

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A proxy computer system for at least one end-to-end data flow in a network, comprising:
 - an estimation unit for estimating a current minimum data load necessary to occupy a bandwidth available to said flow in said network, said estimation unit ~~(300)~~ outputting a flow's pipe capacity estimation;
 - a comparison unit for comparing said estimated pipe capacity with a predetermined capacity threshold ;
 - a decision unit for deciding to proxy said flow if said estimated pipe capacity lies above said capacity threshold; and
 - a routing unit for routing said flow according to the decision.
2. (Currently Amended) A proxy computer system according to claim 1, wherein said routing unit is adapted to route from the network layer of said network to a higher protocol layer of said proxy, data that are to be transmitted through said end-to-end flow if said estimated pipe capacity lies above said capacity threshold.
3. (Currently Amended) A proxy computer system according to claim 1 wherein said capacity threshold depends on a processing load of said proxy.
4. (Currently Amended) A proxy computer system according to claim 1 wherein said estimation unit is adapted to take into account local information received from said network and representing the state of said network.

5. (Currently Amended) A proxy computer system according to claim 1 wherein said flow's pipe capacity estimation is based on the end-to-end worst-case round trip time and the bit rate available to said flow in said network.

6. (Previously Presented) A method for routing an end-to-end flow from a sending entity to a receiving entity in a wireless network, either directly, or via a proxy, comprising the steps of:

estimating a flow's pipe capacity, resulting from an estimation of a current minimum data load necessary to occupy a bandwidth available to said flow in said network,

comparing said estimated pipe capacity with a predetermined capacity threshold, and

determining to proxy said flow if said estimated pipe capacity lies above said capacity threshold.

7. (Cancelled)

8. (Previously Presented) A method for proxying at least one end-to-end data flow in a network, characterised in that it comprises steps of:

estimating a current minimum data load necessary to occupy a bandwidth available to said flow in said network, so as to obtain a flow's pipe capacity estimation;

comparing said estimated pipe capacity with a predetermined capacity threshold;

deciding to proxy said flow if said estimated pipe capacity lies above said capacity threshold; and

routing said flow according to the decision.

9. (Previously Presented) A method according to claim 8, wherein said end-to-end flow is routed from the network layer of said network to a higher protocol layer if said estimated pipe capacity lies above said capacity threshold.

10. (Previously Presented) A method according to claim 8 wherein said capacity threshold depends on a processing load involved in proxying.

11. (Previously Presented) A method according to claim 8 wherein said estimation step comprises a step of taking into account local information received from said network and representing the state of said network.

12. (Previously Presented) A method according to claim 8 wherein said flow's pipe capacity estimation is based on the end-to-end worst-case round trip time and the bit rate available to said flow in said network.

13. (Previously Presented) A method according to claim 8 wherein said flow is transmitted between a sending entity and a receiving entity via a node in said network, wherein said routing step is carried out in said node.

14. (Previously Presented) A method according to claim 13, wherein the flow is routed from the node to a proxy, processed in said proxy and sent towards the receiving entity.

15. (Currently Amended) A proxy computer system for at least one end-to-end data flow in a network, comprising:

means for obtaining a flow's pipe capacity estimation, resulting from an estimation of a current minimum data load necessary to occupy a bandwidth available to said flow in said network,

means for performing a comparison of said estimated pipe capacity with a predetermined capacity threshold,

means for performing a decision to proxy said flow if said estimated pipe capacity lies above said capacity threshold, and

means for initiating a routing of said flow according to the decision, when the product is run on a computer.

16. (Previously Presented) A method according to claim 6, wherein said end-to-end flow is routed from a network layer of said network to a higher protocol layer if said estimated pipe capacity lies above said capacity threshold.

17. (Previously Presented) A method according to claim 6 wherein said capacity threshold depends on a processing load involved in proxying.

18. (Previously Presented) A method according to claim 6 wherein said estimation step comprises the step of taking into account local information received from said network and representing the state of said network.

19. (Previously Presented) A method according to claim 6 wherein said flow's pipe capacity estimation is based on the end-to-end worst-case round trip time and the bit rate available to said flow in said network.

20. (Previously Presented) A method according claim 6 wherein said flow is transmitted between a sending entity and a receiving entity via a node in said network, said routing step is carried out in said node.

21. (Previously Presented) A method according claim 20 wherein the flow is routed from the node to a proxy, processed in said proxy and sent towards the receiving entity.

22. (Currently Amended) The proxy computer system according to claim 15 wherein said means for obtaining said pipe capacity estimation takes into account local information received from said network and representing the state of said network.

23. (Currently Amended) The proxy computer system according to claim 15 wherein said pipe capacity estimation is based on the end-to-end worst-case round trip time and the bit rate available to said flow in said network.